

## AMENDMENT TO CLAIMS

Claims 1-87. (withdrawn)

Claim 88. (currently amended): A method of preparing a dietary supplement or pharmaceutical composition useful for reducing or preventing reactive oxygen species in a mammal, comprising mixing a chemical composition consisting essentially of one or more peptide compound capable of upregulating at least one gene of the group consisting of the genes encoding superoxide dismutase (SOD), and catalase (CAT)and glutathione peroxidase (GST-Px), with a suitable vehicle, wherein said peptide compound having more than one amino acid and having 7 or fewer than 7 amino acids.

Claim 89. (cancelled)

Claims 90-91. (cancelled)

Claim 92. (previously amended): The method according to Claim 88, wherein said peptide compound comprising the formula:

$R_1 Xaa_1 Gly Xaa_2 Xaa_3 Xaa_4 Xaa_5 Xaa_6 R_2$  (SEQ ID NO:3),

wherein  $R_1$  is absent or is an amino terminal capping group of the peptide compound;  $Xaa_1$  and  $Xaa_2$  are, independently, aspartic acid or asparagine;  $Xaa_3$  is absent or Gly;  $Xaa_4$  is absent, Asp, or Phe;  $Xaa_5$  is absent, Ala, or Phe;  $Xaa_6$  is absent or Ala;  $R_2$  is absent or is a carboxy terminal capping group of the peptide compound.

Claim 93. (previously amended): The method according to Claim 88, wherein said peptide compound comprising the formula:

$R_1 Xaa_1 Xaa_2 Xaa_3 R_2$ ,

wherein  $Xaa_1$  is Asp, Asn, Glu, Gln, Thr, or Tyr;  $Xaa_2$  is absent or any amino acid;  $Xaa_3$  is Asp, Asn, Glu, Thr, Ser, Gly, or Leu;  $R_1$  is absent or is an amino terminal capping group;  $R_2$  is absent or is a carboxy terminal capping group; and wherein the peptide compound upregulates expression of a gene encoding an antioxidative enzyme.

Claim 94. (cancelled)

Claim 95. (previously amended): The method according to Claim 88, wherein the peptide compound further comprises an amino terminal capping group and/or a carboxy terminal capping group.

Claim 96. (previously amended): The method according to Claim 95, wherein the amino terminal capping group is selected from the group consisting of:

1 to 6 lysine residues; 1 to 6 arginine residues; a glucose-3-O-glycolic acid group; an acyl group containing a hydrocarbon chain from 1 to 25 carbon atoms in length; an acetyl group; a palmitoyl group; a lipoic acid group; a docosahexaenoic acid group; and combinations thereof.

Claim 97. (previously amended): The method according to Claim 95, wherein said carboxy terminal capping group is an amino group linked to the carboxy terminal carbonyl in an amide linkage.

Claim 98. (previously amended): The method according to Claim 97, wherein said amino group is a primary or secondary amine.

Claim 99. (previously amended): The method according to Claim 88, wherein the said gene is selected from the group consisting of a gene encoding superoxide dismutase, and a gene encoding catalase.

Claims 100 -103. (cancelled)

Claim 104. (previously added): The method as described in claim 88, wherein the said peptide compound comprising fewer than 6 amino acids.

Claim 105. (previously added): The method as described in claim 88, wherein the said peptide compound comprising fewer than 5 amino acids.

Claim 106. (previously added): The method as described in claim 88, wherein the suitable vehicle is selected from a group consisting of a pharmaceutically acceptable excipient, salt, adjuvant and carrier, and a composition purified from a natural source.

Claim 107. (previously added): The method as described in claim 106, wherein said natural source is selected from a group consisting of green velvet antler, deer and elk.

Claim 108. (previously added): The method as described in claim 106, wherein said natural source is selected from a group consisting of plants and microorganisms.

Claim 109. (currently amended): The method as described in claim 88, wherein the said peptide compound is capable of upregulating the genes encoding superoxide dismutase (SOD); and catalase (CAT) and glutathione peroxidase (GST-Px).

Claims 110 - 117. (withdrawn)